# ON A NEW SPECIES OF ICHTHYURUS (CHAULIOGNATHIDAE: COLEOPTERA) FROM SILENT VALLEY

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# Introduction

During the course of an expedition to the Silent Valley an unexplored area of Western Ghats, in April; May 1980 under the leadership of Dr. R. S. Pillai, an interesting group of beetles belonging to the genus *Ichthyurus* was collected. The beetles of *Ichthyurus* are known as one of the primitive beetles in Coleoptera, Gaham (1918). The genus was till recently included in Cantharidae but Miskimen (1961) erected a new family Chauliognathidae and transferred several genera including *Ichthyurus* from Cantharidae to Chauliognathidae. The genus *Ichthyurus* enjoys a wide range of world wide distribution and is represented by 181 species from all over the world out of which 30 species are known from India.

Ichthyurus silentvalleyensis sp. nov. (figs. 1-10).

Male: Ochraceous, with sides of head, basal half of thorax, three fourths of elytra, tip of abdomen, castaneous; body elongate and narrow; beneath thorax black, abdomen light brown.

Head (fig. 1): Vertex ochraceous, sides of head and area below the eyes castaneous and glabrous; eyes large and brown; antennae (fig. 10) long with eleven segments, first and second segments ochraceous, rest brown and all setose; first segment narrow, clavate and edentate; second to fifth irregularly serrate and outwardly dentate, third and fourth segments ochraceous except serrations which are brown.

Thorax (fig. 1): Anterior margin convex and raised slightly; anterior half and basal region ochraceous; disc brown with a transverse fascia fuscous; densily and finely punctate; base of thorax broader than anterior region.

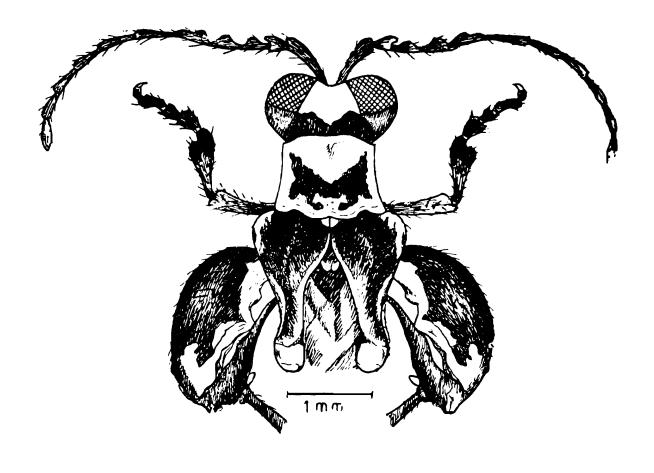


Fig. 1. Ichthyurus silentvalleyensis sp. nov. Male dorsal view of head and thorax.

Elytra (fig. 1): Broad at base and narrow at distal end., apex rounded and ochraceous, rest brown; anterior and inner margins sinuate; distal ends widely separated, both the margins beset with short bristles; elytra extends to one fourth of abdomen. Wings long transparent reaching apex of abdomen.

Legs: Ochraceous, apical halves of tibia and tarsi of front legs black; tarsi of intermediate legs, anterior part of femur and hind legs brown; intermediate femora strongly incrassated (figs 3 & 4) and arched, all legs sericeous, dorsal side of middle femora of dark, with two dentitionst on the inner side and with two teeth beneath,

a central triangular one and a narrow one at the post-ventral side (fig. 5); posterior base strongly elbowed into a long process; posterior process with a broad plate on the ventral side (fig. 5)

Abdomen: Above ochraceous, anterior corners fuscous brown; beneath light brown; terminal segments large, robust and sharp at the apex (figs. 6 & 7).

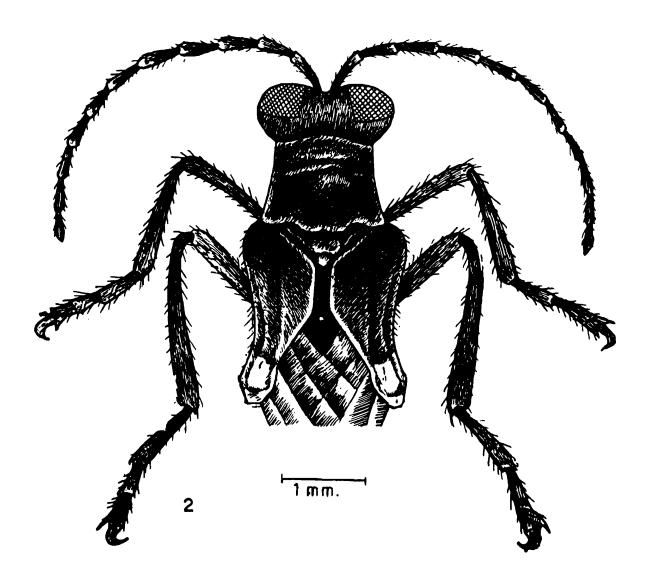
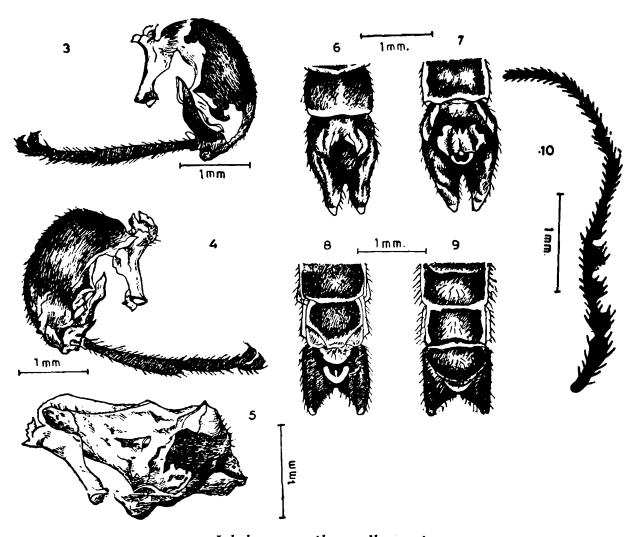


Fig. 2. Ichthyurus silentvalleyensis Female dorsal view of head & thorax.

The female differs from the male, in the following characters: antennae; first segment long, remaining segments uniformly shaped without dentitions (fig. 2); thorax piceous without discal transverse fascia (fig. 2); legs simple, intermediate femora not incrassated; posterior legs long and slender; terminal segments of abdomen widely separated (figs. 8 & 9).

Habitat: The beetles were collected between 850m and 950m. They were not found beyond this level. They rest on leaves with their abdomen curled up and forward. They move very fast on leaves in search of food which consists of insect eggs and larvae. The beetles are seasonal in occurrence. They were collected in the month of April, but they could not be found in December, when a subsequent survey was made in the same area.



Ichthyurus silentvalleyensis

Figs. 3 & 4 Dorsal and ventral views of Intermediate Femora in male. Fig. 5 Lateroventral view of male intermediate femora in male. Figs. 6 & 7 Posterior abdominal segments in male, dorsal and ventral view. Figs. 8 & 9 Posterior abdominal segment in femael; dorsal and ventral view. Fig. 10 Male antenna-dorsal view.

Measurements: in mm — (range in parentheses)

Holotype &: length 9.40, width 1.60, elytral length 2.04

Paratypes 3 3 3 : length (9.08-9.42),) width (1.60-1.64) elytral length (2.04-2.40)

Paratypes 3  $\circ$  : length (9-9.80), width (1.60-1.80), elytral length (2.08-2.32).

Holotype &, Paratype: 3 & &, 3 & 1NDIA, KERALA, Silent Valley 22.iv.80, Koshy Mathew. In Zoological Survey of India, Calcutta.

Remarks: In India, the genus Ichthyurus is represented by 30 species from Karnataka, Kerala, Tamil Nadu, Assam, Uttar Pradesh, Manipur and Sikkim. Gestro (1888-1911), Pic (1916-1922) and Champion (1920-1927).

The new species is very close to the species Ichthyurus andrewesii Gestro from which it is distinguished by the following characters: second segment of the male antennae with a denticle at the apex, third and fourth segments are entirely dentated and not truncated, fifth segment dentate basally and narrowed at apex; interspace between second and third segments very wide. The intermediate femora (fig. 3 & 4) with a long posterior process, elbowed laterally with dentions on the inner margin, a triangular tooth at the mid ventral and a long narrow one at the post ventral side (fig. 5) all the prolongations of the same shape in all the specimens.

# **SUMMARY**

A new species *Ichthyurus silentvalleyensis* is described from Western Ghats, Kerala.

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## REFERENCES

CHAMPION, G. C. 1920. Some Indian Coleoptera, Ent. mon. Mag. London. 56: 241-249.

- CHAMPION, G. C. 1925. Some Indian and Tibetian Coleoptera, Ent.

  Mon. Mag. London 61: 101-131.
- CHAMPION, G. C. 1924. Some Indian Coleoptera. Ann. Mag. nat. Hist. (9) 13: 249-264.
- CHAMPION, G. C. 1927. Some Indian Coleoptera, Ent. mon. Mag. London. 68 (22): 78-85.
- GAHAM, C. J. 1918. A very ancient beetle. *Proc. ent. Soc.* London. XXX IV. (Coleoptera).
- GESTRO, R. 1888. Viaggio di Leonarode Fea in Birmaniae regioni vicine IV. Nerove specie di coleotteri Ann. Mus. Genov (2) VI; 87-132.
- GESTRO, R. 1892. Viaggio di Leonardo Fea in Birmaniae regioni vicine XIV Appendia ai materiali per, la studio del genere. *Ichthyurus. Ann. Mus. Genov.* (2) X:1022-1048 (Coleoptera).
- GESTRO, 1911. Materiali per la studio degli *Ichthyurus Ann. Mus.* Genov. C IV, 45: 44-48.
- MISIKIMEN, C. W. 1961. A new family of beetles found in Cantharidae. Coleoptera. Bull. Wash. 15: 17-25. 5 figs.
- PIC, M. 1916. Melanges exotico entomologiques Moulins 18: 13.
- Pic, M. 1919. Coleopteres exotiques e partie noueaux *Echange Lyan* 35: 19.
- Pic, M. 1921 Melanges exotiques entomologiques Moulin 33: 1-32.
- Pic, M. 1922. Coleopteres Malocodermes noveauxes des collections du Museum Bull. Mus. Hist. Nat. Paris, 49-53.